

REMARKS

In response to the Office Action mailed April 6, 2007, Applicant provides the following remarks. In view of these remarks, Applicant respectfully requests reconsideration of all pending claims. Claims 1-20 remain in the application. Claim 9 has been amended to correct a typographical error and claim 17 has been amended to advance prosecution of the application.

By way of this response, Applicant has made a diligent effort to place all claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned at (858) 552-1311 so that such issues may be resolved as expeditiously as possible.

Claim Rejections - 35 U.S.C. § 103

Claims 1-13 and 15-20 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over published PCT Application No. WO 01/06771 to *Johnson et al.* in view of U.S. Patent No. 6,137,546 to *Shintani et al.*

Claims 1-8 recite “selecting a first single modulation scheme of a plurality of modulation schemes on the first input”. In the previous Office Action response, filed on January 4, 2007, Applicant explained that both *Johnson* and *Shintani* failed to disclose or suggest this limitation making claims 1-8 patentable over any combination of *Johnson* and *Shintani*. In response to Applicant’s arguments, the Office Action asserts that although this limitation is not taught by *Johnson* that it is taught by *Shintani*, (Office Action, Page 2, Line 16 – Page 3, Line 4). Applicant respectfully traverses.

Shintani discloses two separate inputs, one for each type of modulation scheme. *Shintani* teaches that a first Shintani input 12 is for receiving a signal that has an 8VSB modulation scheme and that a second Shintani input 13 is for receiving a signal having an NTSC modulation scheme, (*Shintani*, Figure 3, Column 3, Lines 15-19, 28-30). Each *Shintani* input, thus, supports one and only one modulation scheme. *Shintani*, therefore, fails to disclose or suggest “selecting (a) modulation scheme of a plurality of modulation schemes on a first input”.

Claims 9-13, 15-16 recite “selecting a signal of a plurality of signals to evaluate ... (and) limiting the channel map to the signal and not performing a full auto map”. Applicant explained in the previous Office Action Response that this limitation was not disclosed or suggested by either *Johnson* or *Shintani* making the claims patentable over any combination of *Johnson* and *Shintani*, (Office Action Response, Page 11, Lines 9-Page 12). In response, the Office Action asserts that *Johnson* discloses selecting a single input and scanning only that input and that *Shintani* discloses scanning only a certain modulation scheme, (Office Action Page 4, Lines 10-14). Applicant respectfully traverses.

As explained above, *Shintani* fails to disclose “selecting a signal of a plurality of signals”. The *Shintani*’s disclosure shows two inputs. The first input 12 is for receiving a signal having an 8VSB modulation scheme and the second *Shintani* input 13 is for receiving a signal having an NTSC modulation scheme, (*Shintani*, Figure 3, Column 3, Lines 15-19, 28-30). With *Shintani*’s device, there is no need to select a signal of a plurality of signals to evaluate since one and only one signal is received on each input. Moreover, selecting one of the two inputs to map teaches away from *Shintani* since creating a map of both the 8VSB signal and the NTSC signal is the stated objective of *Shintani*, (*Shintani*, Column 2, Lines 28-34, column 4, lines 57-59, column 5 lines 17-19).

Claims 17-20 recite a “processor coupled with the tuner, wherein the processor receives the first signal and performs a channel mapping of the first signal while limiting the channel mapping to the first signal and not completing a full channel mapping of the other signals received through the plurality of inputs”. Applicant explained in the previous Office Action Response that this limitation was not disclosed or suggested by either *Johnson* or *Shintani* making the claims patentable over any combination of *Johnson* and *Shintani*, (Office Action Response, Page 12, Lines 21-Page 13 Line 4).

The Office Action in response does not appear to directly address Applicant’s explanation and instead asserts “that the independent claims (e.g. claim 17) merely required selecting a first input of a plurality of inputs and selecting a single modulation scheme of a plurality of modulation schemes on a first input, (Office Action, Page 4,

Lines 10-13). The Office Action then asserts that the Examiner is unsure of how a range of signals with a certain modulation scheme is not equivalent to applicant's invention (Office Action, Page 4, Lines 18-20). Applicant respectfully traverses.

Applicant respectfully points out again that Claims 17-20 recite an apparatus for generating a channel map comprising *inter alia* "a processor coupled with the tuner, wherein the processor receives the first signal and performs a channel mapping of the first signal while limiting the channel mapping to the first signal and not completing a full channel mapping of the other signals received through the plurality of inputs". Applicant submits that this limitation is not the equivalent of "selecting a first input of a plurality of inputs and selecting a single modulation scheme of a plurality of modulation schemes on a first input".

Notwithstanding the Office Action's lack of support for its rejection of claims 17-20, to advance prosecution of this application, Applicant has elected to amend claims 17-20 to recite "a selecting device coupled with each of the plurality of inputs, wherein the selecting device selects a first signal from a plurality of signals from one of the plurality of inputs". As explained above, both *Johnson* and *Shintani* have inputs that are each dedicated to a single signal and modulation type and thus fail to disclose this limitation making claims 17-20 patentable over any combination of *Johnson* and *Shintani*.

For the reasons stated above Applicant submits that *Johnson* and *Shintani* fail to show each of the limitations in claims 1-20 and respectfully requests that this rejection be withdrawn.

The Office Action also failed to address the many of the arguments presented in the previous Response. For example with regard to claim 17, Applicants demonstrated that *Johnson* and *Shintani* fail to disclose at least the limitation "a processor coupled with a tuner wherein the processor receives a first signal and performs a channel mapping of the first signal and not does not complete a full channel mapping of the other signals received through the plurality of inputs" (Amendment D, Page 12, Lines 21-27). Regarding at least claim 2, *Johnson* and *Shintani* fail to teach or suggest "the full auto-program includes terminating an auto-program after evaluating only the first modulation scheme without completing an auto-program for any other modulation scheme"

(Amendment D, Page 13, Lines 9-24). Similarly, Applicants previously demonstrated regarding at least claims 13-16 that the combination of *Johnson* and *Shintani* does not disclose “determining whether a channel map exists” (Amendment D, Page 15 Lines 3-8). The pending office action on page 5 cites *Shintani* at column 1, lines 13-19 to support the rejections of claims 13-16. Column 1, lines 13-19, however, supports Applicant’s arguments in that *Shintani* states “[w]hen a television is first plugged in, the channel map or skip channel data base contained in the television receiver contains no channel information ... when the user enters a channel change command such as channel up, the receiver tunes the next higher channel regardless of whether or not a signal is present,” and thus, makes no determination whether a mapping exists, or whether a mapping exists for a selected channel as recited in claim 13, and instead simply identifies that a next channel is not excluded according to the channel map and tunes to the next channel. The Examiner continues in rejecting claim 13 citing column 3, line 65 – column 4, line 20, however, this portion of *Shintani* only describes performing a channel mapping and is not based on any determination whether a channel mapping exists or whether a channel mapping exists for a signal. Therefore, the combination of *Johnson* and *Shintani* fail to teach each limitation of claim 13 and thus, claim 13 is not obvious over the applied combination. Regarding claim 14, the combination of *Johnson* and *Shintani* fails to disclose “determining if the broadcaster is different and initiating the generating of the channel map for the entire selected signal when the determined broadcaster is different than the recorded broadcaster” (Amendment D, Page 15, Lines 10-15). Applicant submits that a *prima facie* showing of obviousness has not been established, and respectfully requests that support for the rejections be provided should the rejections be maintained.

Further, claim 14 stands rejected under 35 U.S.C. § 103(a), as being unpatentable over *Johnson et al.* in view of *Shintani et al* and further in view of U.S. Patent No. 6,775,843 to *McDermott*.

Claim 14 depends from claim 9 and is patentable for the same reasons as claim 9. The *McDermott*’s disclosure relied on in this rejection is directed toward channel

mapping of a virtual channel. The *McDermott* disclosure like *Johnson* and *Shintani* also fails to disclose or suggest selecting a signal of a plurality of signals to evaluate ... (and) limiting the channel map to the signal and not performing a full auto map” making claim 14 patentable over any combination of *Johnson*, *Shintani* and *McDermott*.

Furthermore, as Applicant previously demonstrated, one skilled in the art would not combine *Johnson* with *Shintani* as suggested in the Office Action because such a combination would render *Johnson*’s device inoperable for its intended purpose, thus one skilled in the art would not combine *Johnson* with *Shintani* (see at least Office Action Response page 10, Lines 6-8, Page 12, Lines 12-16). The Office Action, however, failed to respond to Applicant’s explanation and instead simply restated its previous argument that there is motivation to combine without addressing Applicant’s argument that the combination would lead to a device that is inoperable for its intended purpose, (Office Action, Page 3, Line 11-Page 4, Line 4).

Applicant further respectfully submit that it has been established that changes to a prior art device that render the device inoperable for its intended purpose cannot be considered obvious.

[I]t is generally settled that the change in prior art device which makes the device inoperable for its intended purpose cannot be considered to be an obvious change.

Hughes Aircraft Co. v. United States, 215 U.S.P.Q. 787, (Ct.Cl. Trial Div. 1982); see also MPEP 2143.02.

The aforementioned case law is consistent with the Supreme Court’s holding in *KSR v. Teleflex*, *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (U.S. 2007). In *KSR vs Teleflex* the Supreme Court applied a teaching away test in its unobvious analysis and affirmed the test’s validity, *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (U.S. 2007) at 1745). Applicant’s note that a disclosure that teaches how to make and use a device for its intended purpose inherently teaches away from combining elements that would render the device inoperable for its intended purpose.

The Office Action asserts that *Johnson* discloses selecting a first input and only accepting signals with a particular characteristic, (Office Action, Page 6, Lines 5-6). *Shintani* teaches that a first input 12 for receiving a signal having 8VSB modulation scheme and a second input 13 for receiving a signal having an NTSC modulation scheme, (*Shintani*, Figure 3, Column 3, Lines 15-19, 28-30). The combination renders a device that requires selecting either the 8VSB or NTSC. The combination does not allow for creating a map of both the 8VSB and NTSC signals. Creating a map of both the 8VSB signal and the NTSC signal is a stated objective and intended purpose of *Shintani*, (*Shintani*, Column 2, Lines 28-34, column 4, lines 57-59, column 5 lines 17-19) rendering the combination of *Johnson* in view of *Shintani* unobvious.

CONCLUSION

Applicant respectfully submits that the above remarks demonstrate that the pending claims are in a condition for allowance and a Notice of Allowance is respectfully requested.

Respectfully submitted,

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